



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/716,377

11/18/2003

Martin James Starkey

1-24916

4378

4859 7590 01/16/2007
MACMILLAN SOBANSKI & TODD, LLC
ONE MARITIME PLAZA FIFTH FLOOR
720 WATER STREET
TOLEDO, OH 43604-1619

EXAMINER

SALVATORE, LYNDIA

ART UNIT

PAPER NUMBER

1771

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
--	-----------	---------------

3 MONTHS

01/16/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/716,377	Applicant(s) STARKEY ET AL.	
	Examiner Lynda M. Salvatore	Art Unit 1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 December 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 23-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 23-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Applicant's request for continuing examination (RCE), amendment and accompanying remarks filed 12/27/06 have been fully considered and entered. Claims 1-22 have been canceled and new claims 23-32 have been added as requested. Applicant's cancellation of claims 1-22 renders moot the 112 1st and 2nd paragraph rejections set forth in section 3-5 of the Final Office Action dated 8/28/06 and the rejections of claims 1-16, 21 and 22 rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Ness et al., WO 00/27632. However, Applicant's new claims are not found patently distinguishable over the prior art of Ness et al., for reasons set forth herein below.

Claim Rejections - 35 USC § 112

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. Claim 23 is rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for a laminate comprising a surface resin layer, a conducting layer, a resin retention layer, and/or a resin reinforcement layer, does not reasonably provide enablement for limitation of "a fabric material" and "at least one layer of a fiber reinforced molding material including a fiber reinforced resin material". Specifically, there is no disclosure regarding the "fabric layer" recited as part of the surface material. It appears from the claims and specification the resin conducting layer comprises a fibrous textile. Thus, it is not clear if the claimed "fabric layer" is the resin conducting layer or an additional fabric layer. There is also no disclosure regarding the at least one layer of a fiber reinforced molding material including a fiber reinforced

Art Unit: 1771

resin material. The specification only discloses a reinforced resin material but not does disclose that the resin material is reinforced with fibers. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims. Claims 24-32 are rejected for their dependency on claim 22.

4. Claims 23-32 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. With regard to claim 23, it is not clear to the Examiner as to the structural relationship between the surface material and the at least one layer of a fiber reinforced molding material. Specifically, it is not clear as to how each surface layer and the at least one layer of a fiber reinforced molding material are connected to form the claimed laminate structure. In other words, it is not clear as to the layering order and position of each surface layer constituent and the at least one layer of fiber reinforced molding material. In addition, it is still not clear from the specification and/or claims if the resin conducting layer is made up of a separate venting structure and a separate resin retention structure. For purposes of examination, the resin conducting layer limitation will be treated as single layer functioning to vent gases and retain resin. In addition, it is not clear to the Examiner what is meant by "wherein during processing of the laminate in a mold having a surface, a minimum viscosity of the surface resin material is higher than a minimum viscosity of the fiber reinforced resin material to retain the surface resin material on the mold surface" Claims 24-32 are rejected for their dependency on claim 23.

Claim Rejections - 35 USC § 102/103

6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

7. Claims 23-32 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Ness et al., WO 00/27632.

The published PCT application issued to Ness et al., teach a multi-layered moulding material comprising a resin material applied to at least one fibrous layer (abstract). Ness et al., further disclose larger multi-layer structures having fibrous layers attached to film layers (page 4, 5-10 and figure 2). Suitable fiber layers may be in the form of woven fabrics and chopped or continuous mats (page 7, 19-25). Suitable fibers include glass, carbon and polymeric (page 7, 8-15). With regard to claim 24, Ness et al., teach a lightweight fibrous layer weighing 20g/square meter (page 13, 27). In this instance, the Examiner considers the resin material sufficient to meet the limitations of the claimed surface material. The Examiner also considers the fibrous layers sufficient to meet the limitations of the claimed resin conducting and reinforcement layers. With specific regard to claims 24-25, since the Examiner is interpreting the resin conducting layer as comprising a single layer, it is the position of the examiner that a woven fabric is sufficient to meet the limitations presently set forth. With regard to claim 27, the prior art of Ness et al., does not specifically set forth the thicknesses of the individual resin film and the fibrous layers however, Ness et al., does clearly illustrate in figure 1 that the surface resin film is much thinner than the fibrous layers. As such, the Examiner considers such an illustration sufficient to meet

Art Unit: 1771

the claimed limitations. With regard to claim 32, Ness et al., teach applying a resin gel coat to the surface of the moulding composite (page 13,5-10).

With regard to the limitation of “wherein during processing of the laminate in a mold having a surface, a minimum viscosity of the surface resin material is higher than a minimum viscosity of the fiber reinforced resin material to retain the surface resin material on the mold surface”, the Examiner considers such a recitation not a positive limitation and thus not considered a material feature of the laminate article. In addition, said limitation is also considered a method limitation not germane to the final product structure.

The presence of process limitations on product claims, in which the product does not otherwise patentably distinguish over the prior art, cannot impart patentability to the product. *In re Stephens*, 145 USPQ 656

The claimed product appears to be the same or similar to that of the prior art although produced by a different process, the burden shifts to Applicant to come forward with evidence establishing an unobvious difference between the claimed product and the prior art product. *In re Marosi*, 218, USPQ 289, 292

With specific regard to the “adapted to” limitations recited in claims 26,28 and 32 it has been held that the recitation that an element is “adapted to” perform a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. *In re Hutchison*, 69 USPQ 138.

With regard to the processing glass transition temperature, and thermal expansion property limitations recited in claims 29 and 30, although the prior art of Ness et al., does not specifically teach the claimed features it is reasonable to presume that such properties/features

Art Unit: 1771

are inherent to the invention of Ness et al. Support for said presumption is found in the use of like materials such as resin surface layers and thermoplastic woven layers which would provide the claimed processing viscosity, glass transition temperature, and thermal expansion property features. The burden is shifted to Applicant to prove otherwise. *In re Fitzgerald* 205 USPQ 594

In addition, the presently claimed processing glass transition temperature, and thermal expansion glass transition temperature features would obviously have been present once the Ness et al., composite is provided. *In re Best*, 195 USPQ at 433.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lynda M. Salvatore whose telephone number is 571-272-1482. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

January 6, 2007

ls

